ERIC Document Resume	See Instruction Sheet	DATE OF RESUME 8/5/65	DATE RECEIVED

A. PUBLICATION DATA

1. ERIC NUMBER	2. ORIGINATOR CONTROL NO(S).	3. IDENTIFICATION NO.	DO NOT WRITE IN SPACE BELOW
ED000414	7166	N.A.	

4. AUTHOR(S):
Kleinman and Heathers

5. TITLE OF DOCUMENT ABSTRACTED:
A Proposed Program for the Preparation of Elementary Teachers With A Speciality in Mathematics, Science, or Language Arts - Social Studies

6. PUBLICATION TITLE:
N.A.

7. EDITOR(S):
N.A.

8. PLACE OF ORIGIN
NYU
ORG.
Washington Square
STREET
New York, New York
CITY, STATE

9. PUBLISHER OR SOURCE
New York University

10. VOL.	11. PAGES	12. MO./YR.	13. TOTAL PP.
N.A.	N.A.	60	10

TELE. INST/LCC CODE | EXT.

MICROFILM COPY AVAILABLE
YES [X] NO [ ]

COPYRIGHT GRANTED
YES [ ] NO [X]

COPYRIGHT RELEASE FILED
YES [ ] NO [ ]

TYPE OF REPORT
PROPOSAL [X]
IN-PROGRESS [ ]
FINAL [ ]
FOLLOW-UP [ ]

OTHER ERIC REFERENCES:

ERIC SATELLITE CODE

B. INDEXING DATA

14. SUBJECT AREA

15. TYPE OF ENDEAVOR
report

16. INDEXING TERMS (8-12)

planning P-15		elementary edu. G-13		mathematics O-11	
teacher edu. Y-20		programs P-22		science Y-04	
professional edu.	P-20	graduate edu.	S-04	language arts O-01	
				social studies Y-08	

17. ABSTRACT (MAX. 280 WORDS)

Discusses proposed 40-credit graduate program for preparation of elementary teachers with a specialty. Program is designed for graduates with a major in mathematics, science, English, literature, or social science.

ERIC No.

18. SOURCE OF ABSTRACT

C. FUNDING DATA

19. SUPPORTING ORGANIZATION	20. DIVISION OR DEPT.	21. CONTRACT NO. / PROJECT NO.
	22. TOTAL COST OF PROJECT	
	23. DURATION OR PROJECT	U.S. Department of Health, Education, and Welfare Office of Education

ERIC Form 1

IV-12

New York University
School of Education

EXPERIMENTAL TEACHING CENTER

March 4, 1960
(Kleinman, Heathers)

A PROPOSED PROGRAM FOR THE PREPARATION OF ELEMENTARY TEACHERS WITH A SPECIALTY IN MATHEMATICS, SCIENCE, OR LANGUAGE ARTS-SOCIAL STUDIES

Note: This proposed program (see page 5), with introductory and supporting material, is offered as a workable solution to the numerous problems raised in previous meetings of the ETC Advisory Group, and in individual conferences with faculty members of the School of Education.

U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
Office of Education

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated do not necessarily represent official Office of Education position or policy.

What is the nature of the proposed program?

1. Beginning in July 1960, New York University, School of Education, will conduct a master's program to prepare liberal arts graduates having an undergraduate major in mathematics, science, English, literature, or social science as elementary teachers with a specialty in teaching mathematics, science, or language arts-social studies.

2. Graduates of the program will, in addition to being prepared to teach one of the three specialties, be certified as common-branches teachers.

3. The program is intended particularly to prepare elementary teachers for roles as full-time specialists within a departmentalized or semi-departmentalized elementary school, or for roles as specialists in an elementary school employing the "teacher team" plan (e.g., Norwalk, Conn.)

4. In schools that employ the self-contained classroom plan, graduates of the program may serve as common-branches teachers. In this case, they may offer other teachers help in planning and conducting instruction in the area of specialization.

Why prepare elementary teachers with a specialty?

1. Few elementary teachers have, or can be expected to acquire, the interests, knowledge, and competencies required to teach more than one or two curricular areas at a level of adequacy that suits the learning potentialities and needs of young children. Specialization is required if children are to be taught all the various curricular areas competently. The self-contained classroom plan, it is held, denies many children the opportunities to realize their intellectual potentialities because it cannot provide teachers who know well, and enjoy teaching, all the curricular areas they are assigned.

2. Most elementary teachers, at least beyond the primary grades, desire to be relieved of the necessity of teaching some curricular areas. (See: Ackerlund, George. Some Teacher Views on the Self-Contained Classroom. Phi Delta Kappan, April 1959, pages 283-285.) Many elementary teachers desire the privilege of teaching just one or two curricular areas.

ED000414

3. Specialization is a common practice in the teaching of art, music, and physical education in the elementary school. Also, specialist teachers of remedial reading and speech are usual. The new program will provide teachers prepared to specialize in one of the three areas of the curriculum usually regarded as most basic: language arts-social studies, mathematics, and science. It seems hard to justify specialization in some areas, yet deny that it is desirable in the remaining areas.

4. Teacher specialization promises to enhance the professional status of elementary teachers. Instead of being a "fifth-grade teacher," the teacher becomes a language arts-social studies teacher, or a mathematics teacher, or a science teacher, who is prepared to teach his specialty at all levels of work that may be offered in the elementary school. With a focus in his area of choice, the teacher is enabled to keep up to date with materials and methods for teaching children his specialty, and has a reasonable chance of acquiring and maintaining adequate, up-to-date background knowledge of his field.

5. It is probable that many prospective elementary teachers do not enter the field because they do not wish to serve as common-branches teachers. If this is true, then specialization provides access to an important pool of potential elementary teachers. Particularly is it likely that more men would elect elementary teaching if they could look forward to specialist roles (particularly, in mathematics or science).

6. There presently is an unfilled demand for specialist teachers of science, mathematics, and language arts-social studies in the elementary school. A growing number of school systems is employing specialist teachers in these areas. The New York University School of Education has a particular obligation to supply such teachers for the Long Beach and Ossining school systems that are testing the semi-departmentalized dual progress plan. Each year of the 1958-63 test of the plan, these school systems could strengthen their staffs if elementary teachers with specialties in the areas mentioned were available when new teachers are hired.

Why should graduates of the new program obtain common-branches certification?

1. Graduates of the new program must obtain common-branches certification because there is, as yet, no assurance that more than a limited number of jobs as full-time specialists in their chosen areas will be available to them when they complete the program.

2. Thus far, state certification of elementary specialist teachers of mathematics, science, and language arts-social studies is not offered.

What objectives of elementary education will the program stress?

1. Providing for the child as person as well as for the child as learner of subject matter, with recognition that the distinctive and major task of the school is to foster intellectual development.

2. Individualization of learning experiences to suit the child's potentialities and needs in the several curricular areas, and in the curriculum as a whole.

3. Problem-solving thinking in addition to facts and tool skills (though the latter will not be slighted).

4. Cooperative values, attitudes, and skills (to promote effective group membership, leadership, and followership, as well as emotional security and self-esteem).

5. Self-direction and creativity in learning and applying knowledge.

6. Mastery of a learning unit before proceeding to the next unit (but with recognition of the fact that there are levels of mastery that are reached successively at different developmental levels).

7. Integration of knowledge from different curricular areas.

What features of the teacher-education process will the program stress?

1. Utilizing the "project method" in preparing teachers. Students will test educational theory through observation of, and participation in, the teaching-learning process, with class work continuously and intimately blended with field experiences and practice teaching.

2. Utilizing demonstration lessons in the several curricular areas as a way of providing models of good teaching. Integration of demonstrations with tryout via role playing in class or in practice teaching.

3. Teaching students skills in diagnosing pupils' learning needs and readinesses, in lesson planning for individualized work, and in evaluating progress, all in relation to clearly defined learning goals.

4. Teaching students to utilize sub-group teaching, and individual projects (descriptive, analytic, creative).

5. Giving students a working knowledge of the teacher's roles and an understanding of oneself in relation to performing these roles effectively.

6. Giving students a working knowledge of the rationales, organizations, and methods related to the roles of self-contained-classroom teachers and of specialist teachers in the elementary school.

What areas of study or experience are essential to the program?

1. Orientation to American education. The aims, organization, and roles of education in our society. Major philosophical orientations to education should be studied in their historical contexts. An analysis of different organizational patterns for elementary education will be included. The roles and functions of the teacher will receive particular emphasis.

2. Psychological foundations of education. The nature and needs of the learner, his growth and development, theories of the learning process, and educational measurement and evaluation will be stressed. Because this critical area will probably have been slighted in the students' undergraduate work, it requires special attention in the program.

3. The total elementary program. Curriculum, materials, and methods will be studied in relation to areas and levels of instruction. Graduates of the program must be competent to teach, and certified to teach, in the common branches. Even though the graduate may be assigned as a specialist teacher, he must be able to relate his curricular area to other areas and to the total elementary program for purposes of integration and transfer.

4. Curriculum, materials, and methods in the area of specialization. The particular stress on learning to teach a special area must be based on a sound foundation of content courses in the area. The elementary specialist teacher needs intensive work on the integration of subject matter in his field with materials and methods appropriate to teaching the area to young children.

5. Further background courses in the area of specialization. Some students in the program will need to remove background deficiencies in their major area. For example, science specialists should have had course work both in physical and in biological science. Language arts-social studies specialists should have had basic course work in both these fields.

6. Intensive field experiences throughout the duration of the program. The translation of theory into practice is the key task of any program of professional preparation. Extensive as well as intensive field experiences (participation experiences with children and practice teaching) must be intimately blended with course work if this translation is to occur.

7. Individual and group conferences. The integration of course work and field experiences requires the continuous use of the conference method. Weekly group conferences, and very frequent individual conferences, are needed.

How will the focus and unity of the program be insured?

1. The "package program" objective will be incorporated *via* a number of courses specifically designed for the program. Among these, an especially important one will provide regular group conferences to integrate course and field work.

2. Generally speaking, when students in the program take regular School of Education courses, they will be in sections set up for them.

3. The program staff will function as a team in teaching courses, supervising field experiences, conducting individual and group conferences, and evaluating students' work.

A suggested program designed to meet the requirements listed in the previous sections

The program outlined below requires a minimum of 40 credit hours and calls for 10 weeks of course work in the summer session and for a full academic year.

It will be noted that all students in the program, whether preparing to specialize in science, mathematics, or language arts-social studies take one full course in general elementary curriculum, methods, and materials; one half-course in teaching language arts (including reading); and one half-course in teaching social studies.

		Credits	
SUMMER SESSION			
250.3	Philosophical Foundations of Education (Jl.6-22)	3	
235.114	Educational Psychology (Jl. 25- Aug. 12)	3	
POSTSESSION			
125.171	Child Devel. and the Program of Childhood Ed. (Aug.15-26)	2	
New	Introd. to Elem. Educ: Aims, Org., Practices (Aug.27-Sept.9)	2	
		10	
FALL			
New	Gen'l. Elem. Curriculum, Methods, & Materials	6	Package
New	Field Experience in Elem. Education	3	Package
125.60	Language Arts in Childhood Educ. (First ½ of course)	2	
114.1 or 112.23 or 225.287 or 235.49	The Teaching of Science in the Elem. School / The Teaching of Arithmetic / Teaching Reading and Literature in the Elem. School / Reading: Prevention, Detection, & Corr. of Disabilities I	2-3	
?	Elective under advisement to correct deficiency	2-3	
		16	
SPRING			
New	Supervised Student Teaching	8	Package
New	Problems of Elementary Teaching	2	Package
125.182	Social Studies in Childhood Education	2	
114.2 or 112.24 or 125.61	The Teaching of Science in the Elementary School / The Teaching of Arithmetic / Language Arts in Childhood Education	2	
		14	
	TOTAL CREDITS	40	

Description of how the proposed program would be conducted

Summer Session and Postsession: Educational Foundations and Orientation

For the six-weeks' summer session, the student would enroll, under guidance of his advisor, in two foundations courses, one in educational psychology and one in educational philosophy. Each course would carry three credits (200 level) and meet two hours per day for three weeks (30 hours). The courses would be taken consecutively. The course in educational philosophy would deal, within historical context, with philosophies which have affected educational practice in this country. The educational psychology course would emphasize the nature of the individual child, theories of the learning process, and evaluation and measurement.

To round out his general orientation, the student would take work in child development and an introduction to elementary education during the four-weeks' postsession. Each course would meet three hours per day for two weeks (30 hours) and carry two credits (100 level). The courses would be taken consecutively. Work in child development would emphasize the development of "readinesses" through maturation and experiences, and problems of adjustment and learning in childhood. Instructors of the two courses would work together to make clear to students the relationships between the two courses.

The "Introduction to Elementary Education" course would provide intensive orientation to elementary education and to the experimental program. Assigned readings would consist of articles from current periodicals as well as such texts as Education as a Profession by Lieberman, Introduction to American Education by Mort and Vincent, and The Story of Education by Thut. Films, field visits, and guest speakers might be featured to make clear the role of the school in American society, the role of the teacher, and aims and organization of elementary education. This would be a new course for which ETC staff members might assume responsibility.

During the ten-week orientation period, the student would maintain close contact with his advisor. A minimum of three individual conferences would be required to discuss and plan program. During these conferences, particular attention would be given to the nature and purposes of the experimental program. Moreover, an informal social would take place after class hours so that students might become acquainted with one another and with the staff.

Fall: Elementary Curriculum, Methods, Materials; Specialization; Field Experiences

As part of the "package", the student would observe and participate in the field one and one-half days per week and attend related conferences one-half day per week (180 hours). This new course in "field experience" would carry 3 credits and be scheduled by arrangement. Observation and participation would be carefully planned and structured by staff members directly responsible for the "course" in close cooperation with the instructors for general elementary and special methods courses. The related three-hour weekly conference would feature analysis of field experience in the light of principles studied in educational philosophy, educational psychology, general elementary education, and special methods courses. Each student would be required to maintain a log describing and analyzing his experiences in the field. The primary function of this course would be to integrate the related aspects of the program.

A new course in general elementary education would be designed as an overview and emphasize curriculum, methods, and materials for all levels and subject areas for which the elementary school is responsible. This course, as part of the "package" would meet two half-days per week (90 hours) and carry 6 credits (at 200 level). Class meetings would be held on days when students were not in the field. The instructor (one of a team) could draw heavily on field experiences in structuring discussion periods. He would, of course, participate actively in planning the nature of field experiences.

All students would take a special methods course in the teaching of language arts, including basic work in reading (e.g., first half of Language Arts course taught by the Elementary Education Department). This would be a two-credit course and meet two hours per week (30 hours). In addition, each student would take a special methods course appropriate to his field of specialization. Science majors would elect The Teaching of Science in the Elementary School; mathematics majors, The Teaching of Arithmetic; and language arts-social studies majors, either Teaching Reading and Literature in the Elementary School, or Reading: Prevention, Detection, and Correction of Disabilities I.

Many students will have particular interests, needs, or deficiencies based on special background factors. Each student, therefore, would have the opportunity to elect, under advisement, a course intended to round out background or correct deficiencies. Such an elective might be in educational foundations, methodology, or in a subject-matter field.

Spring: Practice Teaching and Special Methods

As part of the "package", each student would undertake an intensive program of practice teaching under the direct supervision of a School of Education staff member. The student would be assigned to a self-contained classroom for half the semester (7-8 weeks), and to a DPP classroom for the other half. The practice teaching program would carry 8 credits (200 level) and require the student to be in the field for three full days and two half-days per week. A minimum of 90 clock hours of actual classroom teaching would be mandatory. A log of experiences with emphasis on analysis would be kept by the student. Additional requirements would be established cooperatively by the supervising and cooperating teachers. While the supervising teacher would visit and observe each student as often as circumstances demand, the minimum number of direct observations would be four. Cooperating and supervising teachers would be responsible for periodic evaluation of the student teacher, but the supervising teacher alone would be responsible for assigning the final grade. Regular individual conferences between supervisor and student would take place.

During one of the half-days the student was not in the field, he would attend and participate in a seminar on problems related to teaching. This course, part of the "package," would carry 2 credits and meet one two-hour session per week (30 hours). An effort would be made to analyze and evaluate teaching experiences in the light of principles studied in previous and concurrent courses.

All students would take a special methods course in the teaching of social studies (e.g., second half of Social Studies in the Elementary School). This would be a 2-credit course and meet two hours per week for a total of 30 class hours. In addition, each student would complete the special methods course appropriate to his field of specialization. Science majors would elect The Teaching of Science in the Elementary School; mathematics majors, The Teaching of Arithmetic; and language arts-social studies majors, the second half of Language Arts in Elementary Education.

Justification for proposing a 40-point program

1. It seems clear that any fully-adequate graduate program of teacher preparation would require more than one year, just as it seems clear that a four-year undergraduate program cannot adequately provide both a sound liberal arts background and preparation for teaching.

2. Any professional preparation program could go on indefinitely. There is scarcely a limit to the level of expertness a neophyte might be required to achieve before being permitted to practice. Practically, however, limits must be placed on the amount of preparation required before the professional begins to work in the field. Continuous "on-the-job training" is a vital need in every profession.

3. The situation in teacher education is especially critical. Because of the extreme shortage of teachers, minimum requirements have been established for various types of emergency certification. In many areas, a college degree and one summer of professional courses (6 credits) enables an individual to begin teaching. A number of intensive teacher-training programs are based on this condition. The fifth-year program herein proposed (40 credits) goes far beyond such minimal requirements. By comparison, this program will provide teachers who are well qualified for the initial experience.

4. In planning teacher-preparation programs, educators must take into account the factor of attractiveness of the program to potential students. The professional program that attracts no students soon becomes extinct. How much preparatory work would college graduates be willing to undertake before entering the teaching profession? Throughout the country, almost all the fifth-year programs for full-time students may be completed in a calendar year (one academic year plus one summer).

5. The existing fifth-year program for elementary teachers at School of Education, New York University, is a forty-point program. The forty-point master's program herein proposed does not differ markedly from that program except that (1) it is based on an undergraduate major in a chosen area of specialization, (2) it includes 4 points of course work in teaching the special area, and (3) it provides field experiences and practice teaching both in the self-contained classroom and in a setting involving specialist teaching of the student's chosen area.

6. Whether the objectives of the proposed program - to prepare the student acceptably for both common-branches and specialist teaching - can be achieved is a research question to be answered in the evaluation of the program.

Evaluating the proposed program

A systematic descriptive analysis and evaluation of the program will be conducted by the Experimental Teaching Center. The evaluation will include the following:

1. Appraisal of student's characteristics at the beginning of the program:

   a. Intellectual abilities

   b. Background knowledge in the elementary curricular areas

   c. Personality characteristics relevant to teaching young children

   d. Educational values

   e. Attitudes and views concerning the aims and methods of elementary education

   f. Career goals

2. Appraisal of student's characteristics as in 1 above, where appropriate, at the end of the program

3. Appraisal of student's occupational status following graduation from the program (especially during first year or two)

4. Appraisal of teaching competencies during the first year following the program in relation to the learning goals listed on page 3 above:

   a. By supervisory personnel in his school system

   b. By FTC observational study of teacher behavior

   c. (Possibly) By measures of pupils' achievement and of pupils' personal social behavior

If practicable, a suitable control group will be selected and evaluated on the items listed above.

Criteria for selecting students for the proposed program

Candidates for the program will be evaluated in terms of the following criteria on the basis of evidence obtained from academic transcripts, tests, recommendations, and interviews.

1. Graduation from an accredited four-year college.

2. Personal-social characteristics. Does the candidate have the personality qualities, and the values, attitudes, and interests, that enable one to work effectively with young children in elementary schools?

3. Demonstrated academic abilities. His undergraduate average should be C+ or better, with a B average or better in his major area. In general, the candidate should have demonstrated that he can master subject matter and can learn to teach young children in ways that foster problem-solving thinking, self-direction, and creativity.

4. Adequate background course work in the area chosen for specialization, or the willingness to make up critical deficiencies.

   a. For a language arts-social studies specialty: A major in a social science, English, or literature. Preferably, a minor in English or literature for majors in social science, and a minor in a social science for majors in English or literature.

   b. For a mathematics specialty: While basic mathematics through the calculus and number theory will be essential, a variety of additional courses such as abstract mathematics, set theory, and non-Euclidian geometry should be given preference.

   c. For a science specialty: A major in one of the sciences should have completed work representative of at least one other science. Ideally, the science major's background should include courses in the natural, physical, and earth sciences.

   Note: Where the graduating institution does not employ the major-minor system, 30 credit hours in a subject area should be considered a major, and 18 credit hours a minor.

5. Career interest in teaching at the elementary level. Evidence of interest in teaching young children should include such experiences as organized work with children in playground supervision, camp counseling, social work or club leadership. Hobbies and special skills related to children's interests should be taken into account.

6. Sustaining interests in the area chosen for specialization. The candidate should present evidence of genuine interest in the area he has chosen to specialize in teaching. Avocational interests are particularly significant. Also, he should present evidence that he will enjoy teaching the area to young children.

7. Willingness to prepare to teach both the self-contained classroom setting and in a setting making provision for teaching a specialty.